Figure 243: Tracing precedents using the Detective

This allows us to check the source cells (which may be a range) for any errors which have caused us to query the calculation result. If a source is a range, then that range is highlighted in blue.

In other instances we may have to trace an error. For this we use the Trace Error function, found under **Tools > Detective > Trace Error**, to find the cells that caused the error.

For more information search for "Detective" in the Help system's index.

Examples of functions

For novices, functions are one of the most intimidating features of LibreOffice Calc. New users quickly learn that functions are an important feature of spreadsheets, but there are hundreds, and many require input that assumes specialized knowledge. Fortunately, Calc includes many functions that anyone can use.

Basic arithmetic and statistics

The most basic functions create formulas for basic arithmetic or for evaluating numbers in a range of cells.

Basic arithmetic

The simple arithmetic functions are addition, subtraction, multiplication, and division. Except for subtraction, each of these operations has its own function:

- SUM for addition
- PRODUCT for multiplication
- QUOTIENT for division

SUM, PRODUCT, and QUOTIENT are useful for entering ranges of cells in the same way as any other function, with arguments in brackets after the function name.

However, for basic equations, many users prefer the time-honored computer symbols for these operations, using the plus sign (+) for addition, the hyphen (–) for subtraction, the asterisk (*) for multiplication and the forward slash (/) for division. These symbols are quick to enter without requiring your hands to stray from the keyboard.

A similar choice is also available if you want to raise a number by the power of another. Instead of entering `=POWER(A1,2)`, you can enter `=A1^2`.

Moreover, they have the advantage that you enter formulas with them in an order that more closely approximates human readable format than the spreadsheet-readable format used by the equivalent function. For instance, instead of entering `=SUM(A1:A2)`, or possibly `=SUM(A1,A2)`, you enter `=A1+A2`. This almost-human readable format is especially useful for compound operations, where writing `=A1*(A2+A3)` is briefer and easier to read than `=PRODUCT(A1,SUM(A2:A3))`.